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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,192

10/13/2005

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EXAMINER

BATISTA, MARCOS

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

08/17/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,192	Applicant(s) SAKATA, MASAYUKI	
	Examiner MARCOS BATISTA	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20,27,29,37,40,44,46,47,49 and 53 is/are allowed.
- 6) ☒ Claim(s) 19,21-26,28,30-36,38,39,41-43,45,48,50-52,54 and 55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/05/2009 and 07/22/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Action is in response to Applicant's amendment filed on 06/18/2009. Claims 19-55 are still pending in the present application. This Action is made **NON-FINAL**.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06/18/2009 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 19, 21, 22, 26, 28, 33, 35, 51, 52, 54 and 55 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments and amendments, see Applicant's remarks pages 15-17, filed 06/18/2009, with respect to claims 20, 27, 29, 37, 40, 44, 46, 47, 49 and 53 have been fully considered and are persuasive. The 103 rejection of Ohlsson et al. (US 20020068571 A1) in view of Fiter et al. (WO 02128130 A2) to claims 20, 27, 29, 37, 40, 44, 46, 47, 49 and the 102 rejection of Fiter et al. (WO 02128130 A2) to claim 53 have been withdrawn. Claims 20, 27, 29, 37, 40, 44, 46, 47, 49 and 53 are now allowed.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2617

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 19, 21, 23-26, 28, 30-36, 38, 41, 43, 45, 48, 50-52 and 54 are rejected under 35

U.S.C. 103(a) as being unpatentable over Chitrapu et al. (US 20030185190 A1), hereafter

“Chitrapu,” in view of Fiter et al. (WO 02128130 A2), hereafter “Fiter.”

Consider claim 19, Chitrapu discloses a mobile communication system, comprising: a mobile terminal unit; a radio base station which communicates with said mobile terminal unit via a radio channel; a radio controller which controls said radio base station and is physically separated into user plane equipment, which controls transfer of user data between a first network and the mobile terminal unit, and control plane equipment, which controls transfer of signaling between the first network and the mobile terminal unit so that the signaling is not transferred through the user plane equipment; and a radio base station replacement control apparatus which controls replacement of said radio base station (see fig. 15, pars. 0075 lines 1- 9, 0078 lines 1 - 0079 line 8 – where Chitrapu discloses physically separating the functionalities of an RNC into control plan server and user plane server, which are coupled by an IP Gateway in the Radio

Art Unit: 2617

LAN),

Chitrapu, however, does not particular refer wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller.

Fiter, in analogous art, teaches wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller (**see fig. 2, page. 10 lines 4-31** - Fiter talks about a mobile terminal moving from a subarea to another subarea without exchanging signaling information with second node; i.e., radio controller servers).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Chitrapu and have it include wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller, as taught by Fiter. The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (**see fig. 2, page 7 lines 1-35, page 10 lines 4-31**).

Consider claim 21, this claim discusses the same subject matter as claim 20. Therefore, it has been analyzed and rejected based upon the rejection to claim 20.

Consider claim 23, Chitrapu as modified by Fiter teaches claim 19, Fiter also teaches a mobile communication system according to claim 19, further comprising a second network,

Art Unit: 2617

wherein said control plane equipment and said user plane equipment are connected across the second network (see fig. 2, page 10 lines 4-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 24, Chitrapu as modified by Fiter teaches claim 23, Chitrapu also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see fig. 15, pars. 0074 lines 1- 9).

Consider claim 25, Chitrapu as modified by Fiter teaches claim 23, Chitrapu also teaches wherein said radio base station replacement control apparatus further comprises means for notifying said control plane equipment of identification information of said radio base station as an object of replacement and identification information of said user plane equipment as an accommodation destination (see fig. 15, pars. 0074 lines 1- 9).

Consider claim 26, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19. In addition, Fiter also teaches a database search unit for searching a database for storing information regarding radio base stations being controlled by a plurality of radio controllers (see page. 8 lines 1-10 – Fiter

Art Unit: 2617

talks about a User Allocation Function that administer the network resources by the radio controller). The motivation would have been in order to keep track of available resources in the network (see page. 8 lines 1-10).

Consider claims 28, this claim discusses the same subject matter as claim 26. Therefore, it has been analyzed and rejected based upon the rejection to claim 26.

Consider claim 30, Chitrapu as modified by Fiter teaches claim 26, Fiter also teaches wherein said control plane equipment and user plane equipment are connected across a network (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 31, Chitrapu as modified by Fiter teaches claim 26, Chitrapu also teaches further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0074 lines 1-9).

Consider claim 32, Chitrapu as modified by Fiter teaches claim 26, Chitrapu also teaches further comprising means for notifying said control plane equipment of identification information of said radio base station as an object of replacement and identification information of said user plane equipment as an accommodation destination(see par. 0074 lines 1-9).

Art Unit: 2617

Consider claim 33, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19. In addition, Chitrapu notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of the user plane equipment which is to newly accommodate the radio base station (see par. 0074 lines 1-9).

Consider claim 34 Chitrapu as modified by Fiter teaches claim 33 Chitrapu also teaches further comprising the step of notifying the control plane equipment of identification information of the radio base station as an object of replacement and identification information of the user plane equipment as an accommodation destination (see par. 0074 lines 1-9).

Consider claim 35, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19. In addition, Chitrapu notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of the user plane equipment which is to newly accommodate the radio base station (see par. 0074 lines 1-9).

Consider claim 36, this claim discusses the same subject matter as claim 25. Therefore, it has been analyzed and rejected based upon the rejection to claim 25.

Consider claims 38, Chitrapu as modified by Fiter teaches claim 20, Fiter also teaches wherein the network which connects said control plane equipment, user plane equipment, and

Art Unit: 2617

radio base station replacement control apparatus (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 41, Chitrapu as modified by Fiter teaches claim 21, Chitrapu also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0074 lines 1-9).

Consider claim 43, Chitrapu as modified by Fiter teaches claim 23, Chitrapu also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user control equipment which is to newly accommodate said radio base station (see par. 0074 lines 1-9).

Consider claim 45, Chitrapu as modified by Fiter teaches claim 28, Fiter also teaches wherein said control plane equipment and user control plane equipment are connected across a network (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Art Unit: 2617

Consider claim 48, this claim discusses the same subject matter as claim 43. Therefore, it has been analyzed and rejected based upon the rejection to claim 43.

Consider claim 50, this claim discusses the same subject matter as claim 43. Therefore, it has been analyzed and rejected based upon the rejection to claim 43.

Consider claim 51, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19.

Consider claim 52, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19.

Consider claim 54, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19.

6. Claims 22, 39, 42 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chitrapu et al. (US 20030185190 A1), hereafter “Chitrapu,” in view of Fiter et al. (WO 02128130 A2), hereafter “Fiter,” further in view of Longoni et al. (US 20040082366 A1), hereafter “Longoni,”

Consider claims 22, this claim discusses the same subject matter as claim 20. Therefore, it has been analyzed and rejected based upon the rejection to claim 20. Chitrapu as modified by

Art Unit: 2617

Fiter, however, does not particular refer wherein the user plane equipment is incorporated into the radio base station, wherein replacement of said radio base station in communication with the mobile terminal unit with another radio base station is controlled by a user data selector and synthesizer unit incorporated into the radio base station.

Longoni, in analogous art, teaches wherein the user plane equipment is incorporated into the radio base station, wherein replacement of said radio base station in communication with the mobile terminal unit with another radio base station is controlled by a user data selector and synthesizer unit incorporated into the radio base station (see pars. 0017 lines 1-7, 0023 lines 1-4 – where Longoni discloses incorporating the RNC functionalities into the base station).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Chitrapu as modified by Fiter and have it include wherein the user plane equipment is incorporated into the radio base station, wherein replacement of said radio base station in communication with the mobile terminal unit with another radio base station is controlled by a user data selector and synthesizer unit incorporated into the radio base station, as taught by Longoni. The motivation would have been in order to *make it easier to use and manage the distributed radio access network* (see par. 0013 lines 9-11).

Consider claims 39, Chitrapu as modified by Fiter and Longoni teaches claim 22, Fiter also teaches wherein the network which connects said control plane equipment, user plane equipment, and radio base station replacement control apparatus (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be

Art Unit: 2617

administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 42, Chitrapu as modified by Fiter and Longoni teaches claim 22, Chitrapu also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0074 lines 1-9).

Consider claim 55, this claim discusses the same subject matter as claim 22. Therefore, it has been analyzed and rejected based upon the rejection to claim 22.

Allowable Subject Matter

7. Claims 20, 27, 29, 37, 40, 44, 46, 47, 49 and 53 are allowed.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2617

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

/Marcos Batista/
Examiner

/Rafael Pérez-Gutiérrez/
Supervisory Patent Examiner, Art Unit 2617

08/12/2009